

# SPECIFICATION

## FOR APPROVAL

Customer : \_\_\_\_\_

Description : Piezo Buzzer

Model No. : FBPT1410

Customer's Model No. : \_\_\_\_\_

ISSUE	CHECK	APPROVAL	CUSTOMER
20.04.14	20.04.14	20.04.14	

### Revision History

NO.	Date	ECN.NO	Edition	Description
1	20.04.14	200414	A0	样品

NingBo Best Group Co., Ltd.

Add:Rm1112,262#416Lane ZhaoHui Road JiangDong NingBo China

Tel:86-574-87793491

Fax: 86-574-87792835

E-mail:sales@fbele.com

<http://www.fbele.com/>

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## 1. ELECTRICAL AND ACOUSTICAL SPECIFICATION

	Item	Unit	Specifications
1-1	Rated Voltage (Square Wave)	Vp-p	5
1-2	Operating Voltage	Vp-p	1-20
1-3	* Rated Current (Max)	mA	1
1-4	* Min Sound Output at 4.0kHz/10cm	dB	50
1-5	* Resonant Frequency	Hz	4000
1-6	Capacitance at 120Hz	pF	15000±30%
1-7	Operating Temperature	°C	-30~+70
1-8	Storage Temperature	°C	-40~+85
1-9	Weight	g	1
1-10	Housing Material		Black NORYL
1-11	Lead Pin Material		Red Copper (DSn)
1-12	Tone Nature		Single

\* Value Applying at Rated Voltage (resonant frequency, 1/2 duty, square wave)

		20.04.14	ZhuYu	Shi Cong	Wang Xue Wen
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## 2.ENVIRONMENTAL TEST

	Item	Specifications
2-1	Storage in High temp.	Storage in $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-2	Storage in Low temp.	Storage in $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-3	Storage in Humidity	Storage in $+40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ 90-95%RH test box for 96 hours, then expose to the room temperature for 2 hours without applying power.
2-4	Thermal cycle test.	<p>Make this test for 5 cycles without applying power, then expose to the room temperature for 2 hours.</p>
2-5	Vibration test	<p>Amplitude: 1.5mm Time : 1min/axis</p> <p>Make this test for the directions of X,Y, Z for 2 hours each (total 6 hours).</p>
2-6	Drop test	Free drop a unit from the height 70cm to the surface of 10mm thick board ,three directions(X,Y,Z).
2-7	Solderability test	Soldering temp.: $260 \pm 5^{\circ}\text{C}$ Heat applying time: $3 \pm 0.5\text{sec}$ .

### PASS CRITERION :

After these tests , the change of S.P.L shall be within  $\pm 5 \text{ dB}$  .

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## 3.MEASURING METHOD(BUZZER MODE)

### 3-1 .Test Condition

#### 3-1-1.STANDARD

Temperature :  $25 \pm 3^{\circ}\text{C}$

Relative humidity : 60% ~ 70%,

Atmospheric pressure : 860mbar to 1060mbar

#### 3-1-2.JUDGEMENT

Temperature : 15 ~ 35 $^{\circ}\text{C}$

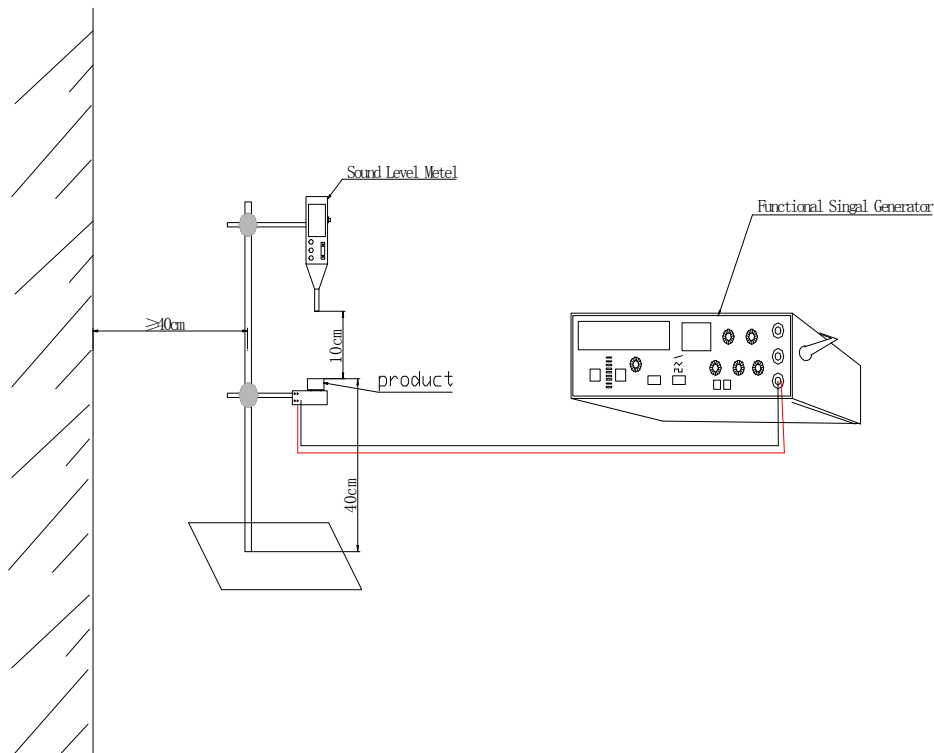
Relative humidity : 45% ~ 85%,

Atmospheric pressure : 860mbar to 1060mbar.

### 3-2 . Standard Test Fixture

3-2-1.rated Voltage(Square wave):5V

3-2-2.Resonant Frequency:4000Hz



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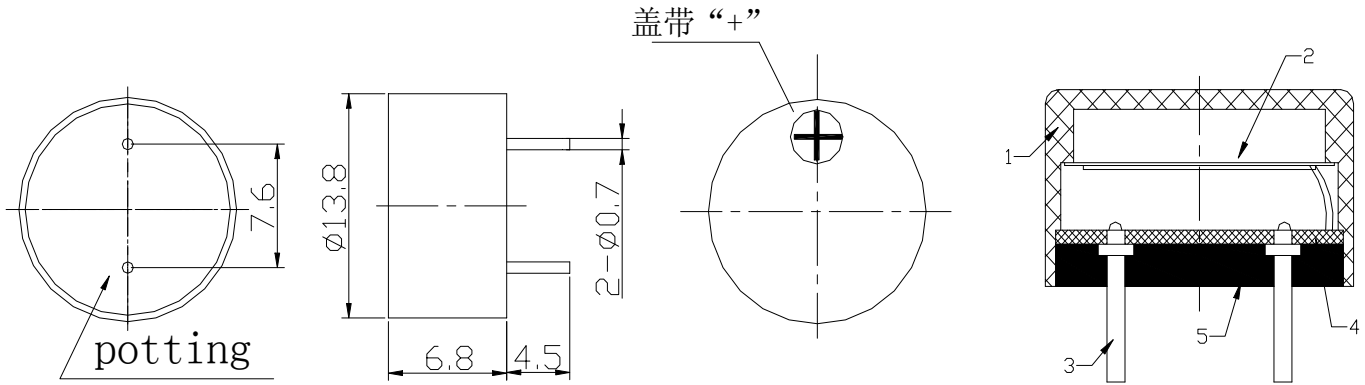
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## 4.DIMENSIONS

Unless otherwise specified, tolerance:  $\pm 0.5$ (unit:mm)



- 1) All parts must meet to ROHS.
- 2) Wave solder and wash allowed

7				
6				
5	Epoxy		Resin	
4	PCB	1	Epoxy Board	
3	Lead Pin	2	Red Copper(DSn)	
2	Piezo element	1	Brass	
1	Housing	1	Black NORYL	
Part No.	Part Name	Q'TY	Material	Remark

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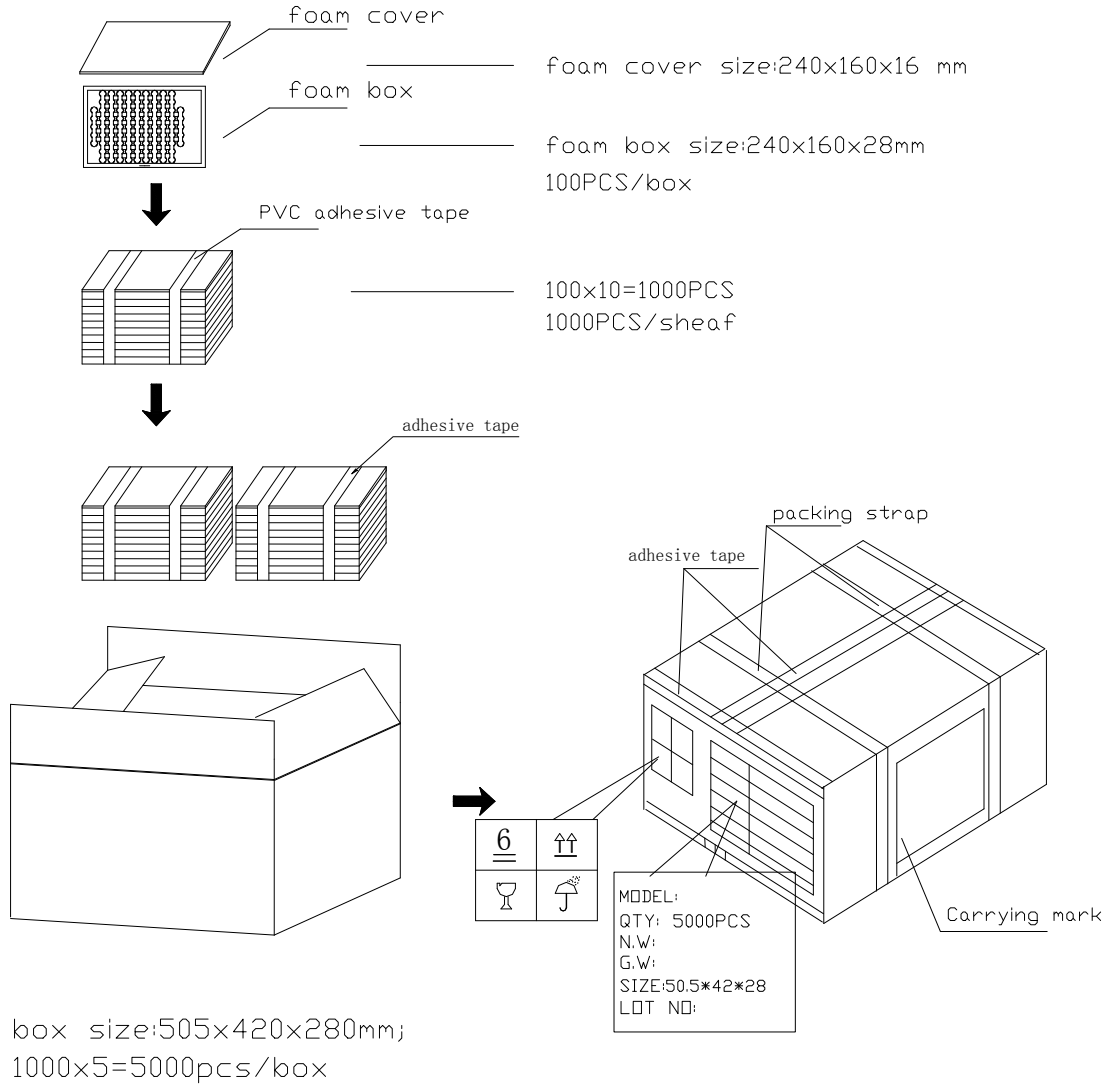
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## 5.PACKING



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